UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/741,676	12/19/2003	Jaroslaw J. Sydir	Intel-019PUS	4166

7590   12/18/2007

Daly, Crowley & Mofford, LLP
c/o PortfolioIP
P.O. Box 52050
Minneapolis, MN 55402

EXAMINER
YOUNG, NICOLE M

ART UNIT	PAPER NUMBER
2139	

MAIL DATE	DELIVERY MODE
12/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/741,676	SYDIR ET AL.
	Examiner	Art Unit	
	Nicole M. Young	2139	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 September 2007*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16 and 18* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 March 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This communication is in response to the Amendment of application 10/741,676

received on September 24, 2007. Claims 1-16 and 18 are pending. Claims 1, 5, 9, and

14 are amended.

Claim Rejections - 35 USC § 103

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable

over **Ohta et al. (US 2002/0083317)** hereinafter Ohta and further in view of **Platko et al**

(US 6,363,444) hereinafter Platko.

Claim 1, 5, 9, 14 discloses (Currently Amended) a processor, comprising:

Ohta teaches an authentication buffer configured to store authentication data

including ciphered-network-packet data subject to authentication data in Figure 12, Data

Accumulation Unit 304a and 304b; paragraph [0011] states "a data block accumulation

unit that outputs the accumulated amount to the authentication processing unit when it

reaches the smallest data block size for the authentication processing", teaches,

network packet data subject only to authentication and not to ciphering, and network

packet data subject to ciphering and authentication (Ohta paragraph [0046], processing

contexts), Ohta does not teach but Platko teaches wherein the authentication buffer

includes a circular first-in-first-out (FIFO) arrangement in Figures 4 and 5 associated

text column 7 lines 1-24 in particular line 22 recites a "the FIFO buffer is a circular

buffer" It would be obvious to one of ordinary skill in the art at the time of invention to

use a FIFO buffer for the authentication buffers disclosed by Ohta. The motivation to

combine would be that the authentication in Ohta uses the same techniques as in

Platko (column 7 lines 3-5, DES and MD5); and

at least one authentication core coupled to the authentication buffer to

authenticate the authentication data from the authentication buffer (Figure 12,

Authentication Processing Unit 305a and 305b and associated text in paragraph

[0104]).

Ohta teaches the added limitation of data "subject only to authentication and not

to ciphering" in Figure 3 column 4 Authentication Processing and associated text. The

data only for authentications takes the path of going from the Encryption and

Authentication Processing Control Unit to the Authentication Processing Unit without

being encrypted or decrypted.

Claim 2, 6, 12 discloses (Currently Amended) the processor of Claim 1, wherein the

circular FIFO arrangement includes a moveable start of data pointer and a moveable

end of data pointer (Platko column 7 lines 15-24 especially "The FIFO buffer...wrap

from entry 15 back to entry 0).

Claim 3, 7, 13, 18 discloses (Currently Amended) the processor of Claim 1, wherein

the network processor further includes at least one cipher core adapted to operate with

a cipher algorithm (Ohta Figure 12, Encryption and Authentication Processing Control

Unit 301 and associated text in paragraph [0104]) and the at least one authentication

core is adapted to operate with an authentication algorithm (Figure 12, Authentication

Processing Unit 305a and 305b and associated text in paragraph [0104] Ohta), and a

size of the authentication buffer is selected in accordance with a data block size

associated with the cipher algorithm and a data block size associated with the

authentication algorithm (Ohta Figure 12, Data Accumulation Unit 304a and 304b;

paragraph [0011] states "a data block accumulation unit that outputs the accumulated

amount to the authentication processing unit when it reaches the smallest data block

size for the authentication processing").

Claim 4, 8 discloses (Currently Amended) the processor of Claim 1, wherein the

authentication core is adapted to authenticate the authentication data from the

authentication buffer as blocks of authentication data (Ohta in Figure 12, Authentication

Processing Unit 305a and 305b and associated text in paragraph [0104]).

Claim 10, 15 discloses (Original) the method of Claim 9, wherein the moving to an authentication buffer authentication data comprises selecting the authentication buffer from among a plurality of authentication buffers (Ohta Figure 12, Data Accumulation Unit 304a and 304b; paragraph [0011] states "a data block accumulation unit that outputs the accumulated amount to the authentication processing unit when it reaches the smallest data block size for the authentication processing").

Claim 11 and 16 discloses (Original) the method of Claim 9, further including:

setting a start of data pointer and an end of data pointer to respective initial locations;

setting the end of data pointer in accordance with the moving the authentication data to the authentication buffer; and

setting the start of data pointer in accordance with the moving to the authentication core the block of data from the authentication buffer (Platko teaches wherein the authentication buffer includes a circular first-in-first-out (FIFO) arrangement in Figures 4 and 5 associated text column 7 lines 1-24 in particular line 22 recites a "the FIFO buffer is a circular buffer" also Platko column 7 lines 15-24 especially "The FIFO buffer...wrap from entry 15 back to entry 0).

Claim 17 (Cancelled)

Response to Arguments

Regarding claim 1, the Applicant argues that the prior art does not disclose the added limitation "network packet data subject only to authentication and not to ciphering. The Examiner respectfully disagrees. Ohta teaches the added limitation of data "subject only to authentication and not to ciphering" in Figure 3 column 4 Authentication Processing and associated text. The data only for authentications takes the path of going from the Encryption and Authentication Processing Control Unit to the Authentication Processing Unit without being encrypted or decrypted.

The Applicant argues that Ohta does not disclose an authentication buffer. The Examiner respectfully disagrees. The Examiner cites Data Accumulation Unit 304a and 304b; paragraph [0011] which states "a data block accumulation unit that outputs the accumulated amount to the authentication processing unit when it reaches the smallest data block size for the authentication processing". The Data Accumulation Unit outputs the data when it has reached a predetermined amount. The Data Accumulation Unit is therefore storing the data until the time when the amount of data meets this limitation. The Applicant argues that the FIFO buffer of Plantko does not disclose using the buffer as an authentication buffer. The Examiner respectfully disagrees. Platko FIG. 4 shows the high-level structure of the encryption engine 18. An encryption processor 32 performs data encryption, integrity verification and authentication functions. In particular, the encryption processor 32 includes logic for encryption/decryption according to the Data Encryption Standard (DES), and for authentication using the

Message Digest 5 (MD5) hash algorithm. As above, Ohta discloses an authentication

buffer. Platko is used to teach that the authentication buffer can function in a FIFO

process. In combination of both references the Examiner considers every limitation to

be disclosed.

In response to applicant's argument that there is no suggestion to combine the

references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Independent claims 5, 9, and 14 have corresponding features to claim 1 and are

rejected on the same grounds.

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nicole M. Young whose telephone number is 571-270-

1382. The examiner can normally be reached on Monday through Friday, alt Fri off,

8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NMY
12/12/2007

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100